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(71) Applicant (for all designated States except US): FOUR CORNERS GROUP, INC. [US/US]; 3265 Neil Road, Reno, NV 89502 (US).

(72) Inventors; and

- (75) Inventors/Applicants (for US only): JONES, Roger, H., Jr. [US/US]; 3265 Neil Road, Reno, NV 89502 (US). LICA-TA, Ricky, D. [US/US]; 4170 Power Keg Circle, Reno, NV 89509 (US).
- (74) Agents: SEKA, J., Georg et al.; Townsend and Townsend Khourie and Crew, Steuart Street Tower, 20th Floor, One Market Plaza, San Francisco, CA 94105 (US).

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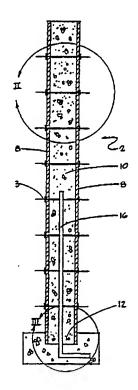
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(54) Title: IMPROVED BUILDING WALL AND METHOD OF CONSTRUCTING SAME

(57) Abstract

A simple, environmentally benign building (2) for on-site erection and fabrication is made of monolithic, architectural, strutural walls (1), beams, girders, joists and panels (8) of relatively high physical strength which exhibit great durability and resistance to fire, wind and seismic damage and which have highly desirable acoustic and thermal transfer characteristics. The wall is constructed by casting a core (10) of flowable fibrous, foam cement mix between two, thin panels (8) of manufactured, exterior-grade fiberglass reinforced cement board. Particles and proteins from the core mix penetrate, migrate into and fill interstitial spaces in the cement board, forming a strong, continuous and homogenous bond between the fill material (10) and the board itself. This imparts additional strenght to the cement board by filling the interstitial voids, creating a solid, homogeneous wall. The wall, girder, etc. structure is fabricated at the building site to form seamless, monolithic wall units according to the lost-form system of casting by erecting, assembling and appropriately connecting the fiber cement boards (8). An outer cement board (8) is used as a permanent form creating one side of the building wall. The fiber-foam-cement core supplies structural strength, insulating properties and monolithic bonding of all components. An inner, cement board (8) creates the interior side of the wall.



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